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LETTERS TO THE EDITOR.

* * * Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

Twenty copies of the number containing his communication will be furnished free to any correspondent on request.

The editor will be glad to publish any queries consonant with the character of the journal.

The Scientific Swindler Again.

A YOUNG man of gentlemanly bearing, who calls himself Dr. S. M. Gutmann, and claims membership in the American Chemical Society, has been lately imposing on various members of the scientific fraternity in New York and vicinity. He claims to be a pupil and son-in-law of Professor Hofmann of Berlin, and shows letters purporting to come from some well-known persons, who recommend him as an expert in the manufacture and analysis of coal-gas. He is familiar with the names of chemists and physicists in this country, and uses them with freedom by way of introduction to strangers. He represents himself to be in pecuniary straits, as the result of long and fruitless efforts to obtain employment since his arrival in this country.

Since there are many readers of *Science* whom he will attempt to victimize, it may be well to warn them against this plausible and mendacious vagabond.

W. LECONTE STEVENS.

Brooklyn, Feb. 10.

Psychics, or the 'New Psychology.'

THE 'new psychology' is a term I have noticed cropping up of late, used as the expression, the 'new chemistry,' or any similar phrase, might be to indicate a late and advanced state of a science, such as may properly bear out the word 'new' in comparison with an old or former less-advanced stage of evolution of a given subject. Referring to several dictionaries at my elbow, I find the word 'psychics' defined as 'the same as psychology,' and marked '[Rare.]' in one of them.

In this connection, I beg leave to quote a sentence from a little treatise on psychics entitled 'Can Matter Think?' published in 1886, where I say (p. 29), "I have said what I think the excellent word 'physiology' should really mean. But I wish that the sadly abused term 'psychology' could be rooted out of the dictionary, or consigned to the same limbo where 'theology' has already been put by sound science and wise philosophy. 'Psychology' means any thing, from the vagaries of superstitious spiritualism to a system of mental philosophy or a code of metaphysics. As we have the good word 'physics' for all the physical or rupo sciences, I should like to see 'psychics' replace psychology, with the distinct understanding," etc.

What I mean by this word is precisely what seems to be implied by the expression 'the new psychology;' and many may be inclined to agree with me, that 'psychics' is a short, handy name which commends itself, or, so to speak, carries its own credentials.

A *propos* of words, did not *Science* (or was it *Literary World* of Boston?) discuss lately the propriety of the adjective 'sciential' as a desirable new coinage to characterize any thing pertaining to science? If so, it may not be generally known that 'sciential' is Miltonian, as in the lines, —

"But first, low reverence done, as to the power
That dwelt within, whose presence had infused
Into the plant *sciential* sap."

Paradise Lost, ix. 837.

— where the meaning is 'science-making' or 'productive of knowledge,' — exactly what 'scientific' literally means, though such literal sense is not implied in the ordinary usage of the word, which 'sciential' was proposed to replace.

ELLIOTT COUES.

Washington, D.C., Feb. 13.

The Expansion of Pine Wood through Absorption of Water.

DURING the summer of 1886, while seeking for a method for securing a measure of the soil moisture, I conducted an experiment to discover the amount and rate of the expansion in a section of white pine wood in passing from a state of complete saturation to one of complete dryness. While looking over my notes, I find the data, and, as the experiment was carefully performed, have thought that possibly the results may be worth putting on record. The results secured were as follows:—

| Date. (1886.) | Weight of Section. (Grams.) | Per Cent of Water, calculated on Dry Weight. | Length. (Inches.) | Per Cent of Expansion, calculated on Dry Length. |
|------------------|--------------------------------|--|----------------------|--|
| Aug. 22 | 505.0 | 22.76 | 11.12 | 5.30 |
| " 23 | 475.4 | 17.91 | 11.12 | 5.30 |
| " 24 | 54.4 | 12.70 | 11.10 | 5.11 |
| " 25 | 440.5 | 9.25 | 11.08 | 4.92 |
| " 26 | 428.5 | 6.27 | 11.02 | 4.37 |
| " 27 | 423.7 | 5.08 | 11.02 | 4.37 |
| " 28 | 412.7 | 2.35 | 10.84 | 2.46 |
| " 29 | 407.9 | 1.16 | 10.68 | 1.14 |
| " 30 | 407.9 | 1.16 | 10.68 | 1.14 |
| Sept. 1 | 403.2 | — | 10.56 | — |
| " 2 | 403.2 | — | 10.56 | — |

A section two inches in length was sawed off from the end of a sound, unchecked, white pine board, one and one-eighth inches thick, and of such a width that the section when completely dry was 10.56 inches long. The section was then immersed for thirteen days in a tank containing spring water, of which the temperature was about 60° F., to secure saturation. It was then exposed to the air of a dry room, and its weight and length noted daily until it ceased to lose weight, after which it was placed in a drying-oven and completely dried.

E. S. GOFF.

N.Y. Agric. Exper. Station, Geneva, Feb. 9.

Queries.

28. FLOATING DROPS VERSUS FLOATING NEEDLES. — In order that drops of water may float on the general surface, there must be entire absence of any thing which might diminish surface-tension. But the text-books, even the last edition of Ganot's 'Traité de Physique,' direct us to slightly grease needles before dropping them upon the water. Stanley, on p. 49 of his book on fluids, asserts that a polished steel wire one inch long and five-hundredths of an inch in diameter just floats if thoroughly cleaned with caustic potash and wiped dry to prevent oxidation. He says, "If there was the smallest particle of grease upon the wire, a much less diameter only would be supported." And in the same book are experiments to prove that a wire should be wetted in order to float. It may be that slightly greasing a needle does more good by smoothing over an imperfectly polished surface, than harm by diminishing surface-tension; but the phenomenon of floating drops appears to me to confirm the statement in quotation-marks above. Will some one kindly inform me where I can find a discussion of the statements of Stanley on this subject?

F. C. VAN DYCK.

New Brunswick, N.J., Feb. 11.

Answers.

20. STAR OF BETHLEHEM. — Three distinct objects have been confounded in the public mind; viz., the planet Venus, Tycho's new star of 1572, and the apparition called the Star of Bethlehem. The brilliant object visible in daylight was Venus. Tycho's star was visible in the north in the constellation of Cassiopeia in 1572, and has been thought by some, on the slenderest evidence, to be a variable of long period, which might re-appear about this time. A good account of it is found in Humboldt's 'Cosmos,' Vol. III. Chapter IV. For an account of the theories about the Star of Bethlehem, consult the unabridged edition of Smith's Bible Dictionary, Vol. III., under the heading, 'Star of the Wise Men.'

H. A. HOWE.

University of Denver, Feb. 4.